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ACCOUNTING EDUCATION AND STRENGTHENING OF THE PROFESSION: REPORTS OF INTERNATIONAL AND REGIONAL ORGANIZATIONS

Professional accounting education: some requirements for the year 2000 and beyond

Note by the Secretary-General

The following paper was contributed by the International Federation of Accountants. Since the International Federation is devoted to strengthening the accounting profession world wide, it has a unique perspective of the skills and knowledge accountants need to function in the global economy. The paper complements the reports of the Secretary-General and should enable the Group to discuss, in a comprehensive manner, the type of education which is required to attain the necessary skills and knowledge. The Transnational Corporations and Management Division acknowledges with appreciation this contribution.

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* E/C.10/AC.3/1993/1.

Annex

PROFESSIONAL ACCOUNTING EDUCATION: SOME REQUIREMENTS FOR THE YEAR 2000 AND BEYOND

SUMMARY

This report presents an educational programme which will develop the knowledge and the skills necessary for professional accountants working in the year 2000 and beyond. It is clear that the environment in which the accountants will be working will be quite different from past environments due to the increasing globalization of business and the rapid changes in technology. The key to success in such an environment will be the ability to adapt to change. Accordingly, to be effective, the educational programme must focus heavily on the teaching of skills, such as the ability to learn, to communicate and to work effectively with others. The suggested approach to education relies heavily on university training for the general knowledge and accounting phases, with specialized knowledge to be provided by the accounting profession itself.

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INTRODUCTION

1. The International Federation of Accountants (IFAC) was invited to contribute a short paper on the subject of accounting education and how it should be shaped so that it prepares accountants to meet the challenges that face them world wide. This paper was written by Cecil Donovan, Chairman of the Education Committee. It is an excerpt from a paper prepared by Farhad Simyar, Concordia University, Montreal, Canada, for the Education Committee of IFAC and presented at the XIV World Congress of Accountants, in Washington, D.C., in October 1992. The Federation accepted the invitation because its mission - the development and enhancement of the accountancy profession to enable it to provide services of consistently high quality in the public interest - leads it to focus heavily on the preparation of accountants.

2. The advancement of accountancy education is no easy task in today's dynamic environment. There are dramatic changes due to:

(a) Globalization of business enterprises;

(b) Strategic economic and trade alliances;

(c) Rapid advancement in the development and use of information technology;

(d) Increasing governmental and bureaucratic regulation;

(e) Drastic changes in user's behaviour.

3. The constantly changing political, social and economic environment faced today and the uncertainties of the future raise the need for educators to take a new look at the education process and to re-examine constantly the professional and academic accounting curricula. The thoughts presented here summarize the requirements for professional accounting education in the year 2000 and beyond.

4. The first part of the paper will deal with the skills and knowledge requirements of accountants in the year 2000 and beyond. The second part will address a particular curriculum design which may be used to impart the requisite knowledge and skills.

I. THE APPROPRIATE FOCUS FOR ACCOUNTING EDUCATION

5. The education of student accountants, with a professional designation its ultimate objective, occurs in many different ways around the world. In a simplified form one can think of programmes lying on a continuum from a point where all formal education is provided by institutes of higher learning such as universities, with no involvement of professional bodies and no practical

experience to a point where all formal education is designed and delivered by a professional body, coupled with practical experience acquired through internships.

6. What all these programmes have in common is the perceived need to include more and more technical material in order to cope with the ever increasing complexities of the general business environment. However, no graduate can be expected to have the range of knowledge and skills of an experienced professional accountant. To attain and maintain the expertise of a professional accountant requires continuous learning. Therefore, rather than adding more and more technical material, pre-entry education should lay the base on which life-long learning habits can be built. In other words, students should be taught how to learn as well as how to accumulate knowledge.

7. Learning in current accounting curricula is often defined and measured in terms of knowledge of principles, standards, concepts and facts. Unlike the medical or legal profession, this "transfer of the body of knowledge" approach has been the traditional focus of accounting education. In contrast, the goal of the Accounting Education Change Commission in the United States is to shift the focus to "learning to learn" - that is, developing students' motivation, research capability and capacity to learn. Learning to learn involves developing skills, knowledge and professional orientation that help candidates learn more effectively and to use these effective learning strategies to continue to learn throughout their lifetime, as new knowledge and skills become needed.

8. Programmes focused on teaching students how to learn accounting must address three issues: process, content and attitudes.

9. The process of learning should focus on the ability to:

(a) Identify problems;

(b) Seek opportunities;

(c) Search for desired information;

(d) Analyse and interpret the information;

(e) Reach a well reasoned conclusion from among feasible alternatives.

10. Students must be active participants in the learning process, not passive recipients of information. They should identify and solve unstructured problems that require use of multiple information sources. Learning by doing and working in groups should be encouraged, and creative use of technology is essential.

11. Teaching methods that expand and reinforce basic communication, intellectual and interpersonal skills should be used. This will require that educators be trained and motivated to use new methods, approaches and technologies.

12. Technological developments have resulted in changes in the external as well as the internal environment of the profession. The major Western European countries, Japan and North America today possess the technological capability necessary for achieving significant breakthroughs in various aspects of managing organizations. Such developments prescribe a different approach to professional accounting education and training, utilizing the latest tools and techniques of high technology integrated into professional pre-qualification education programmes.

13. The education programme must create a base upon which continued learning can be built. Developing an understanding of underlying concepts and principles and the ability to apply and adapt those concepts and principles in a variety of situations is essential to life-long learning. A focus on memorization of rules and regulations and mere accumulation of knowledge is not the goal of learning to learn. The base on which life-long learning is built may be classified into two components: skills and knowledge.

II. SKILLS TO BE DEVELOPED THROUGH ACCOUNTING EDUCATION

14. To become successful professionals accounting graduates must possess communication skills, negotiation skills, intellectual skills, interpersonal skills, accounting skills, and personal skills. These will be defined below.

15. Communication skills will become of particular importance to the accountant because, in the year 2000 and beyond, for many reasons, the business world will be more interdependent, and corporate structures will be larger. There will be more interdependence between people from different backgrounds and disciplines within an organization, and the trend of specialization of duties will force interdependence of people in order to complete whole tasks. Highly technological products will require more communication between firms and industries, due to their complexity. Moreover, the number of users to which the accountant must respond will be greater, and the globalization of trade will require communication between people from different nations, socio-economic environments and cultures.

16. The basic communication skills are the ability to transfer and receive information; the ability to present, discuss and defend views; and reading, listening and writing effectively. Other skills, such as knowing the appropriate time to communicate, non-verbal communication and communicating with people from different backgrounds, must also be taught.

17. The importance of negotiation skills to professionals is being increasingly recognized. Negotiation skills must encompass an understanding of the meaning and limits of negotiation, negotiating tactics and the negotiating process, and the role of power in negotiating. Professionals must be able to negotiate with people who have different value systems or different backgrounds, and to do so in an international environment.

18. Intellectual skills include the following:

(a) Capacities for inquiry, abstract logical thinking, inductive and deductive reasoning, and critical analysis;

(b) Ability to identify unstructured problems in unfamiliar settings and to apply problem-solving skills in a consultative process;

(c) Capacity to comprehend an unfocused set of facts which is often incomplete;

(d) Ability to identify and anticipate problems and find acceptable alternative solutions;

(e) Ability to understand the determining forces in a given situation and the ability to predict their effects on different alternatives;

(f) Ability to have inductive thought processes and capabilities for judgement to support each alternative;

(g) Ability to identify ethical issues and apply a value-based reasoning system to ethical questions and problems;

(h) Ability to manage sources of stress by selecting and assigning priorities within restricted resources and to organize work to meet tight deadlines.

19. Interpersonal skills include the following:

(a) Ability to work with others, particularly in groups, to influence them, to organize and delegate tasks, to motivate and develop people, and to withstand and resolve conflict;

(b) Ability to assume leadership positions within their own firms while possessing the requisite managerial skills;

(c) Ability to interact with culturally and intellectually diverse people in a global environment.

20. In today's technological and materialistic society, it is easy to neglect the recognition of human skills. By human skills is meant the development of positive human qualities such as understanding, sympathy, empathy, compassion and respect. These qualities promote the protection of man's physical and emotional well-being. The accountant of the year 2000 will not, and must not, be a robot; he/she will be a human being dealing in a complex technological environment with other human beings. This will be further complicated by the fact that these human beings will be relating to people from different social, moral, economic, political and religious backgrounds. Human skills are the lubricant that will smooth the working of this new order.

21. As one contemporary has put it "high tech, high touch": the more intense the technological environment, the greater the need for human skills. Educators must provide the accountant of the year 2000 with an appreciation for the well-being of his fellow human beings and a method for him/her to communicate this sensitivity to the people he/she deals with. These skills can best be taught as early as possible in the accountant's education. Pre-qualification education should nurture human skills by incorporating them as one of the objectives of accounting education.

22. Finally, personal capacities and skills such as the following (but not limited to them) must be developed during the course of studies: creative thinking, research and enquiry, integrity, energy, motivation, persistence, empathy, leadership, sensitivity to social responsibilities, and a commitment to life-long learning.

III. KNOWLEDGE TO BE ACQUIRED THROUGH ACCOUNTING EDUCATION

23. Accounting graduates should have general knowledge, organizational and business knowledge, and accounting and auditing knowledge. General knowledge will help accounting professionals to understand the complex interdependence between the profession and society and to interact with diverse groups of people. Such general knowledge should include an appreciation of the flow of ideas and events in history, an awareness of the different cultures and socio-political forces in today's world, and broad understanding of mathematics and economics.

24. General knowledge comprises:

(a) An understanding of the flow of ideas and events in history and the different cultures in today's world;

(b) Basic knowledge and appreciation of art, psychology, economics, mathematics through calculus and statistics, and science;

(c) A sense of the breadth of ideas, issues, and contrasting environmental forces in the world;

(d) An awareness of personal and social values and of the process of inquiry and judgement.

25. In terms of organizational and business knowledge, professional accountants must understand the work environments found in organizations. They must understand the basic internal workings of organizations and the methods by which organizations change. Because organizations are affected by increasing dependency on technology, accounting professionals must understand the current and future technology. They must also have a knowledge of:

(a) The activities of business, government, and non-profit organizations, and of the environments in which they operate, including major forces and influences;

(b) Finance, including financial statement analysis, financial instruments and capital markets, both domestic and international;

(c) Interpersonal and group dynamics in business.

26. A strong fundamental understanding of accounting is necessary for successful accounting careers. This understanding includes the ability to:

(a) Identify goals, problems and opportunities;

(b) Identify, gather, measure, summarize, verify, analyse, and interpret financial and non-financial data that are useful for addressing problems;

(c) Use data and exercise judgement in solving real-world problems.

27. The focus should be on developing analytical and conceptual thinking based on professional standards. In addition to acquiring in-depth knowledge in specialized areas, such as financial accounting, management accounting, taxation, information systems, auditing, and non-profit, governmental and international accounting the student should develop an understanding of, among other topics:

(a) The history of the accounting profession and accounting thought;

(b) Content, concepts, structure, and the meaning of reporting for organizational operations, both for internal and external use, including the information needs of financial decision makers and the role of accounting information in satisfying those needs;

(c) Policy issues, environmental factors, and the regulation of accounting;

(d) Ethical and professional responsibilities of an accountant;

(e) The handling of financial data in business organizations, including the role of information systems;

(f) The future role of computer-based information technology;

(g) The processes of control that provide for the accuracy and integrity of financial data;

(h) The nature of attest services and their procedural basis;

(i) Taxation and its impact on financial and managerial decisions;

(j) The ethics of the profession, in order to be able to make value-based judgements and address issues with integrity.

IV. CURRICULUM DESIGN FOR DEVELOPING THE NECESSARY SKILLS AND KNOWLEDGE

28. Professional accounting education can be divided into four components: general education, general business education, general accounting, education, and specialized accounting education. These components can be addressed in a variety of ways. No one model of accounting education will be appropriate for every country. Nevertheless, some minimum coverage of all four areas should be part of the content of the education of every accountant.

29. One suggested approach is to use a three-phased education curriculum. Phase 1 would consist of general education in the underlying university disciplines, including those pre-professional areas that are particularly relevant to accounting education, such as general business education. Phase 2 would consist of the conceptual general professional education core of the accounting discipline which spans all areas of accounting. Phase 3 would consist of various bodies of professional accounting knowledge that apply the overall discipline to specialized areas of accounting practice.

30. The proposed general university education curriculum must provide the accounting student with skills needed to apply other disciplines, such as history and science, to practical professional accounting problems. The curriculum for general education should develop students' capacities for inquiry, abstract logical thinking, and critical analysis and should train them to understand the use of quantitive data. It should improve their writing skills to the degree that they can perform at the level acceptable for professional accountants and should give them some awareness of the ingredients of research. It should develop speaking and listening skills, historical consciousness, international and multicultural knowledge, an appreciation of science, and the study of values and their role in decision-making. This goal will not be met by a random set of courses; some structured set of courses is required, but the structure should not be overly restrictive.

31. Professional accountants must understand the environment in which they work. Accounting programmes should therefore include courses designed to develop knowledge of the functional activities of business, government, and non-profit organizations. The courses should cover finance, marketing, operations, organizational behaviour, and how the general manager integrates all these functions.

32. The accounting courses in the general professional accounting curriculum should be more concerned with concepts, goals, and broad principles than with detailed descriptions of current practice. The courses should present accounting as an information development and communication process. The central theme should be how information is identified, measured, communicated, and used. The courses' essential components should be:

(a) Decision-making and information in organizations;

(b) Design and use of information systems;

(c) Financial information and public reporting, including attestation;

(d) Knowledge of the accounting profession.

Courses should focus on both basic concepts and the application of these concepts in real-world environments, including international and ethical issues.

33. The electives appropriate for the general professional accounting curriculum should be comprehensive, conceptual courses that span the entire scope of each identified area.

34. The specialized professional curriculum should deal extensively with prevailing professional practices. The programme should be taken only after the attainment of general accounting, organizational, and business knowledge. Therefore, it should be offered primarily at the post-baccalaureate level and via continuing education. Specialized accounting programmes may include advanced study in financial accounting, management accounting, taxation, information systems, auditing, and government, non-profit and international accounting. Continuing professional education may overlap considerably with specialized accounting education offered by universities.

V. CONCLUSIONS

35. This report proposes an educational programme that will develop knowledge and skills necessary for professional accountants working in the year 2000 and beyond. It is clear that the environment in which the accountants will be working will be quite different from past environments due to the increasing globalization of business and rapid changes in technology. The key to success in such an environment will be the ability to adapt to change. Accordingly, to be effective, the educational programme must focus heavily on the teaching of skills, such as the ability to learn, to communicate and to work effectively with others.

36. The accountant will not be able to rely on memorized standards but instead may need to be able to devise unique solutions to one-off problems. Therefore, a broad-based background which will suggest various solutions is called for.

37. The suggested approach to education relies heavily on university training for the general knowledge and accounting phases, with the specialized knowledge to be provided by the accounting profession itself. For such an approach to work it is critically important for the professional accounting organizations to work closely with the universities and their faculties. Good working relationships take as long a time to develop as does curriculum change. Since the year 2000 is just around the corner, there is no time to lose.

Appendix

SUMMARY OF GUIDELINES OF THE EDUCATION COMMITTEE OF THE INTERNATIONAL FEDERATION OF ACCOUNTANTS

1. The Education Committee is a standing committee of the Council of the International Federation of Accountants (IFAC). Members of the Committee are nominated by the member bodies in the countries selected by the Council to serve. The Committee was established to develop guidelines, discussion papers and other documents on both pre-qualification education and training of accountants and on continuing professional education for members of the accounting profession.

2. The recommendations contained in the International Education Guidelines developed by the Committee are intended to establish the essential elements on which education and training programmes, both pre- and post-qualification, for all accountants should be founded. Although the guidelines are not intended to override the requirements of individual member bodies, the member bodies should consider the recommendations in developing their individual programmes.

3. The Committee has, to date, issued 10 guidelines, of which 6 were consolidated into one guideline, number 9.

4. Below is a summary of the four guidelines outstanding as of 1993.

Guideline 2. Continuing professional education

5. The development of this guideline was undertaken in recognition of the fact that, in many countries, the profession is granted the privilege of self-regulation and, in some cases, of reserved functions. These privileges carry a corresponding responsibility on the profession to ensure, so far as it can, the quality of service provided by its members. One approach to this is through the operation of an effective programme of continuing professional education.

6. The guideline recommends that all member bodies proceed with the development of programmes of continuing education supported by adequate teaching resources and having as a primary objective the maintenance of an adequate level of technical knowledge among its members, given the evolution of new techniques, changing responsibilities and economic conditions.

7. The guideline does not recommend a fixed core of subjects and leaves the choice of subject to the member body. It further states that continuing education courses need not be limited to subjects which are of immediate use in the member's daily work but may also include programmes dealing with social, economic and environmental trends likely to have an impact in the present and future upon the work environment of the profession.

8. It is recommended that each professional accountant undertake a minimum of 30 hours per annum (or a minimum of 90 hours in every three-year period) of structured learning activity, supplemented as appropriate by regular unstructured learning. In general, structured learning is normally directed towards a particular topic whereas unstructured learning may consist of reading the general business press and professional journals.

9. The guideline reviews three approaches to implementing a continuing education programme - i.e., voluntary, mandatory and monitored voluntary - but recommends that the latter approach be adopted as a starting position. It is suggested that this approach will give guidance and motivation to the member, provided the member body advises the member to regard this minimum level of participation as best practice. The approach will also give the member body a measure of the extent to which its guidelines are being adhered to as well as an adequate base of information upon which to make future policy decisions.

10. The Guideline ends by providing the member bodies with suggestions as to how best to organize an effective continuing education programme.

Guideline 7. Education and training requirements for accounting technicians

11. Guideline 7 was developed in response to recommendations made at the Asian and Pacific Conference on Accounting Education in order to develop guidance for the education of persons who may pursue a career in the field of accounting which supports that of a professional accountant (referred to as "accounting technicians"). The job of an accounting technician is clearly distinguishable from a clerical job in accounting and will require, for some aspects, knowledge, understanding and application of both the principles and techniques of accounting.

12. The guideline outlines how a programme of training, undertaken over a period of no less than the equivalent of two years of full-time training, might be structured.

13. It is recognized that the range of work of a technician may vary widely, and therefore a general approach, rather than a detailed blue print, is provided. The general approach recommends that a combination of training and formal education be used. Under this approach, entrants would first undergo a period of basic office training, and learn such things as the use of equipment and services as well as the ability to perform a range of clerical tasks.

14. Upon successful completion of the basic office training, the entrant would be further trained through the selection of various modules which would consist of business training, training in basic skills such as communication and supervision, and accounting.

15. The aim of the formal education programme for accounting technicians is to provide knowledge of underlying concepts and standard accounting techniques and the broad purpose for which they may be used. The specific objective of formal courses is to make the training more relevant and better understood by trainees. The formal programme should include, as a minimum, courses on:

(a) Basic accounting processes and systems;

(b) Basic communications;

(c) Organizational administration;

(d) Numeracy and statistics;

(e) Accounting concepts and practice;

(f) Elements of information systems;

(g) Organizational environment (legal and socio-economic);

(h) Accounting and organizational control.

Guideline 9. Prequalification education, tests of professional competence and practical experience of professional accountants

16. Guideline 9 represents a consolidation of six guidelines dealing with education, training and examination, leading to a professional qualification, and it makes recommendations on:

(a) The standard of general education for a student to be enrolled for education leading eventually to professional qualification;

(b) The theoretical content of professional studies and examinations;

(c) The standards of examinations leading to qualification as a professional accountant;

(d) The practical experience requirements.

17. The guideline enumerates various practices adopted by member bodies across the world to ensure that candidates possess the required educational background to be admitted to membership. It recommends that the standard for a person seeking to commence a course of study leading to membership in an accountancy body should be equivalent to that which would entitle one to admission into a university degree course or its equivalent.

18. The guideline next identifies the subjects to which all accountants should be exposed, called the "core of knowledge". The subjects are identified as follows:

Core	Supportive
Financial accounting	Economics
Management accounting	Law
Information technology	Mathematics and business finance
Auditing	Statistics
Taxation	Behavioural sciences
	Management

19. It is stressed that the emphasis in educating the students should be on the integration of the various core and supportive subjects as they relate to the overall professional environment.

20. Because of the importance of computers to the accountant and the general advances in information technology, the guideline has a separate section on ways in which to integrate information technology into the curriculum.

21. The guideline next addresses the topic of professional examinations. Although it is recognized that many of the essential qualities of a professional, such as honesty and independence, are not capable of being tested, public confidence in the competence of the professional depends to a large extent on the adequacy of the examination process.

22. The guideline recommends that the tests of professional competence come at the end of the educational process and that they should test more than just theoretical knowledge. The emphasis should be on the ability of candidates to apply their theoretical knowledge to practical problems of the type likely to be encountered by a newly qualified accountant. In addition, the test should examine for those characteristics of professional competence which can be tested, such as:

(a) The student's appreciation of the ethical requirements of the profession;

(b) The ability to extract from various subjects the knowledge required to solve integrated problems;

(c) The ability to distinguish the relevant from the irrelevant in a given body of data.

23. The guideline also recognizes the need for all prospective members to participate in the activities of professional accountants during a period of training, referred to as "practical experience".

24. The period of practical experience should be sufficiently long for the student to obtain a good understanding of the organization and function of the business and to develop the appropriate personal capabilities and skills for professional competence. It is believed that normally this will require a period not less than three years in duration.

25. The guideline ends by discussing the responsibilities of the member body and the employer in ensuring that the student acquire the appropriate experience.

Guideline 10. Professional ethics for accountants: The educational challenge and practical application

26. Guideline 10 was developed in recognition of the fact that an essential prerequisite for any group of professional accountants is the acceptance and observance of professional ethical standards regulating their relationships with users of accounts, employers, employees, and members of the general public. It is therefore a duty of member bodies to ensure that their prospective and current members have an adequate understanding of the professional ethics which should govern their behaviour.

27. The guideline recommends that the topic of professional ethics be an important element in the education process and gives suggestions as to how this status might be achieved. For the formal education process, it is suggested that the topic would ideally be introduced as a separate course and then integrated into subsequent courses through such techniques as case studies, outside speakers and other means. The practical experience period should be structured so as to provide opportunities to observe the application of ethics in the work situation.

28. The guideline ends by recommending that member bodies keep their members informed about the views and expectations of the professional body and the public relating to the application of professional ethics in a time of change through the use of such vehicles as seminars and articles in professional journals.